What is claimed is:

1. A visual image display, comprising:

a fiber-optic faceplate comprising:

an upper face;

a lower face; and

a multiplicity of straight optical fibers positioned between the upper face and the lower face of the faceplate;

wherein longitudinal axes of the optical fibers are parallel to each other and substantially perpendicular to the upper face and the lower face of the faceplate; and

wherein each of the fibers collects and projects through the faceplate a plurality of light rays emitted by an ambient light source; and

a layer of suspended particle device (SPD) positioned underneath the lower face of the faceplate, wherein the layer of SPD comprises:

particles suspended in droplets of a liquid light valve suspension, wherein the particles are capable of absorbing or reflecting the plurality of light rays; and

a pair of electrodes positioned in contact with opposite surfaces of the layer of SPD, wherein orientations of the particles depend on an application of an electric field to the electrodes.

2. The visual image display of claim 1, further comprising a transparent conductive layer coated underneath the lower face of the faceplate and on top of the layer of SPD.

3. The visual image display of claim 1, further comprising perimeter seals at both ends of the layer of SPD.

4. The visual image display of claim 1, wherein the particles align in the direction of the electric field when the electric field is applied, whereby the layer of the SPD becomes substantially transparent to the plurality of light rays.

5. The visual image display of claim 1, wherein particles randomize when the electric field is removed, whereby the layer of the SPD becomes substantially opaque.

6. The visual image display of claim 1, further comprising color filters positioned on a rear

substrate to produce a color display, wherein the rear substrate is positioned underneath the layer of the SPD.

7. The visual image display of claim 1, wherein the fiber-optic faceplate is formed to a thickness within the range of approximately 0.25 to 5.0 millimeters.

8. The visual image display of claim 1, wherein the layer of SPD comprises a layer of SPD fluid.

9. The visual image display of claim 1, wherein the layer of SPD comprises a layer of SPD film.

10. The visual image display of claim 9, further comprising a thin layer of index matching fluid positioned on top of the layer of SPD film.

11. A visual image display, comprising:

a fiber-optical faceplate through which light can pass;

a layer of suspended particle device (SPD) positioned underneath the faceplate, wherein the layer of SPD comprises:

particles suspended in droplets of a liquid light valve suspension, wherein the particles are capable of absorbing or reflecting the plurality of light rays; and

a pair of electrodes positioned in contact with opposite surfaces of the layer of SPD;

wherein orientations of the particles depend on an application of an electric field to the electrodes; and

a transparent conductive layer coated underneath the faceplate and on top of the layer of SPD.

12. The visual image display of claim 11, further comprising perimeter seals at both ends of the layer of SPD.

13. The visual image display of claim 11, wherein the particles align in the direction of the electric field when the electric field is applied, whereby the layer of the SPD becomes substantially transparent to the plurality of light rays.

14. The visual image display of claim 11, wherein particles randomize when the electric field is removed, whereby the layer of the SPD becomes substantially opaque.

15. The visual image display of claim 11, further comprising color filters positioned on a rear substrate to produce a color display, wherein the rear substrate is positioned underneath the layer of the SPD.

16. The visual image display of claim 11, wherein the layer of SPD comprises a layer of SPD fluid.

17. The visual image display of claim 11, wherein the layer of SPD comprises a layer of SPD film.

18. The visual image display of claim 17, further comprising a thin layer of index matching fluid positioned on top of the layer of SPD film.

19. A visual image display, comprising:

a fiber-optic faceplate comprising:

an upper face;

a lower face; and

a multiplicity of straight optical fibers positioned between the upper face and the lower face of the faceplate;

wherein longitudinal axes of the optical fibers are parallel to each other and substantially perpendicular to the upper face and the lower face of the faceplate; and

wherein each of the fibers collects and projects through the faceplate a plurality of light rays emitted by an ambient light source;

a layer of suspended particle device (SPD) positioned underneath the lower face of the faceplate, wherein the layer of SPD comprises:

particles suspended in droplets of a liquid light valve suspension, wherein the particles are capable of absorbing or reflecting the plurality of light rays;

perimeter seals at both end of the layer of SPD; and

a pair of electrodes in contact with opposite surfaces of the layer of SPD;

wherein orientations of the particles depend on an application of an electric field to the electrodes; and

wherein the layer of the SPD becomes substantially transparent to the plurality of light rays when the electric field is applied, and substantially opaque when the electric field is removed; and

a transparent conductive layer coated underneath the lower face of the faceplate and on top of the layer of SPD.

20. The visual image display of claim 19, further comprising color filters positioned on a rear

substrate to produce a color display, wherein the rear substrate is positioned underneath the layer of the SPD.